OIPE JC68
OCT 29 2004
PATENT & TRADEMARK OFFICE

FIG. 1

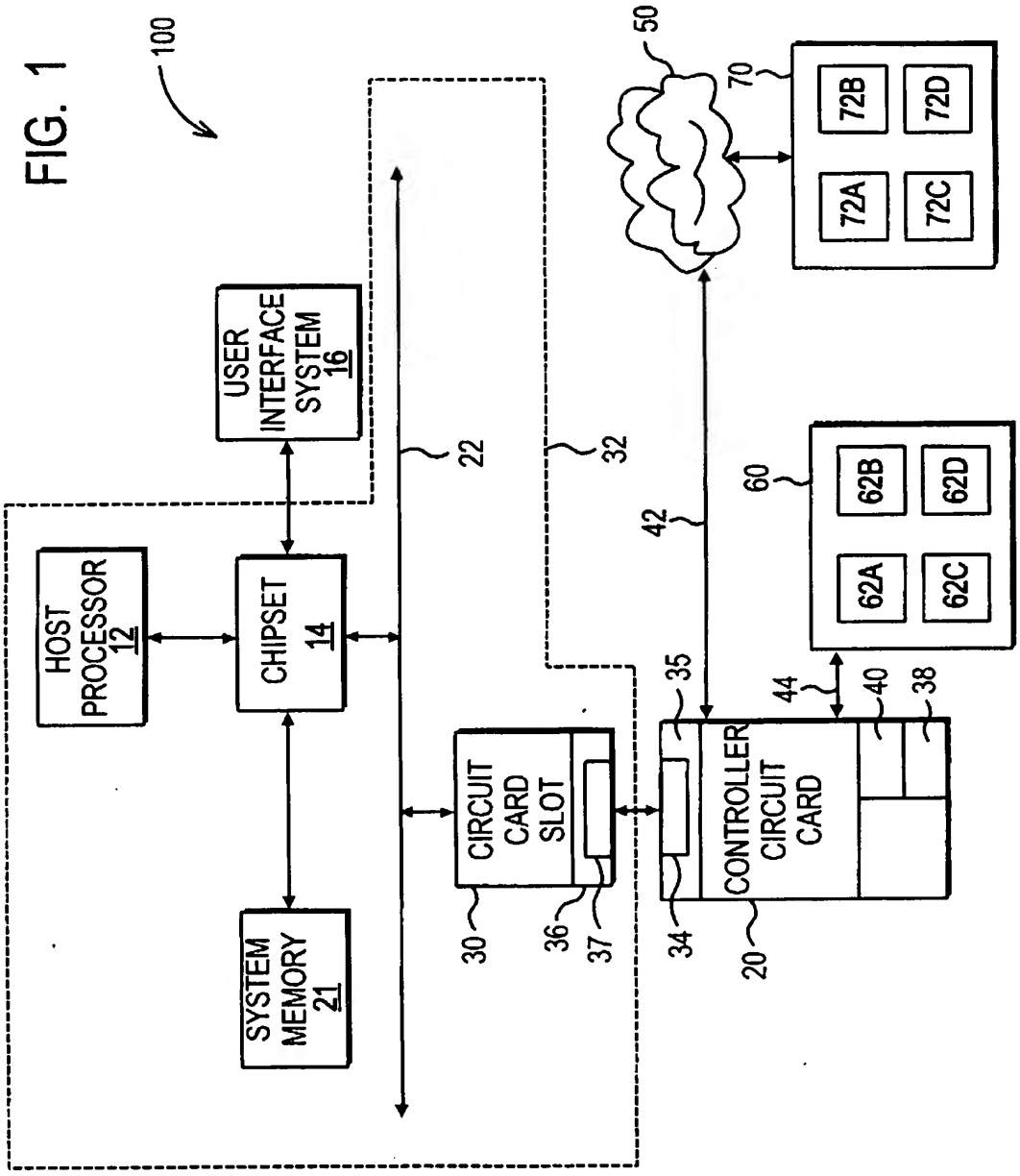


FIG. 2

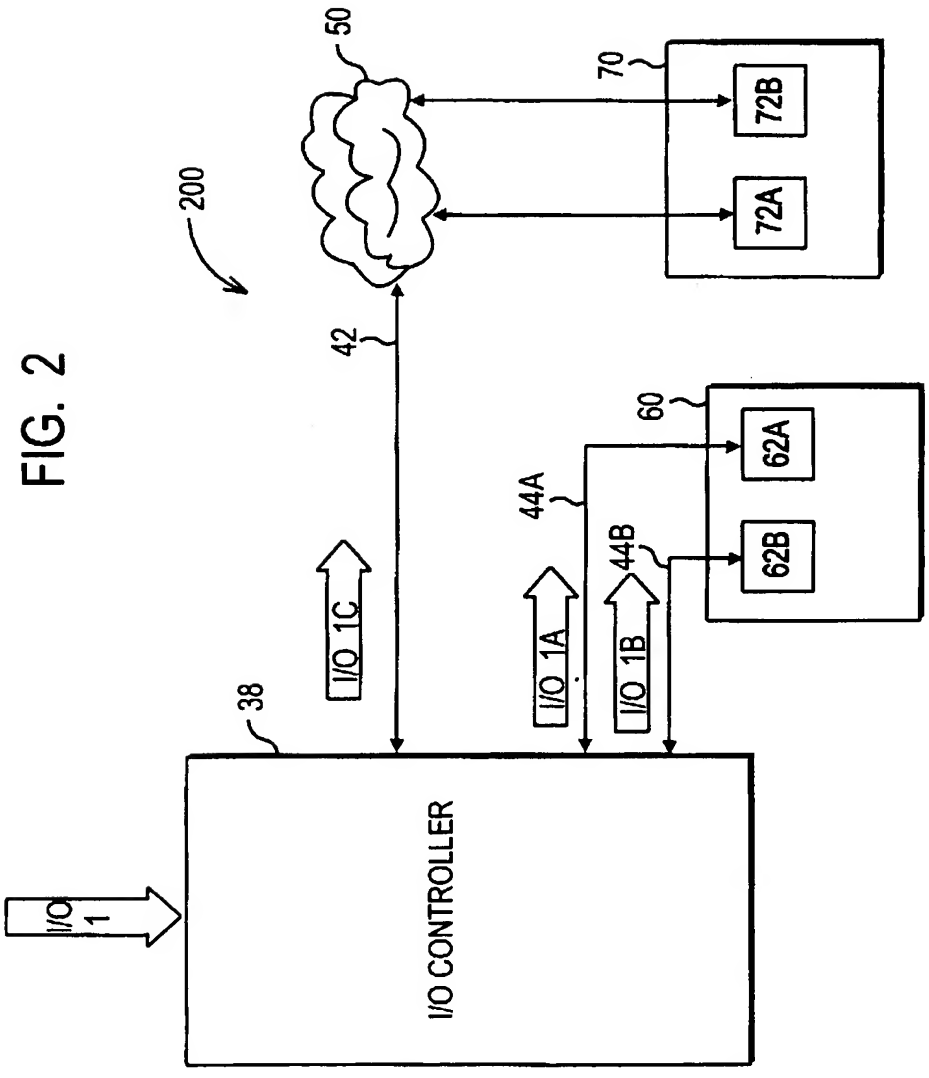

I/O 1
I/O CONTROLLER
38
I/O 1C
I/O 1A
I/O 1B
42
44A
44B
60
62A
62B
50
70
72B
72A
200

FIG. 3

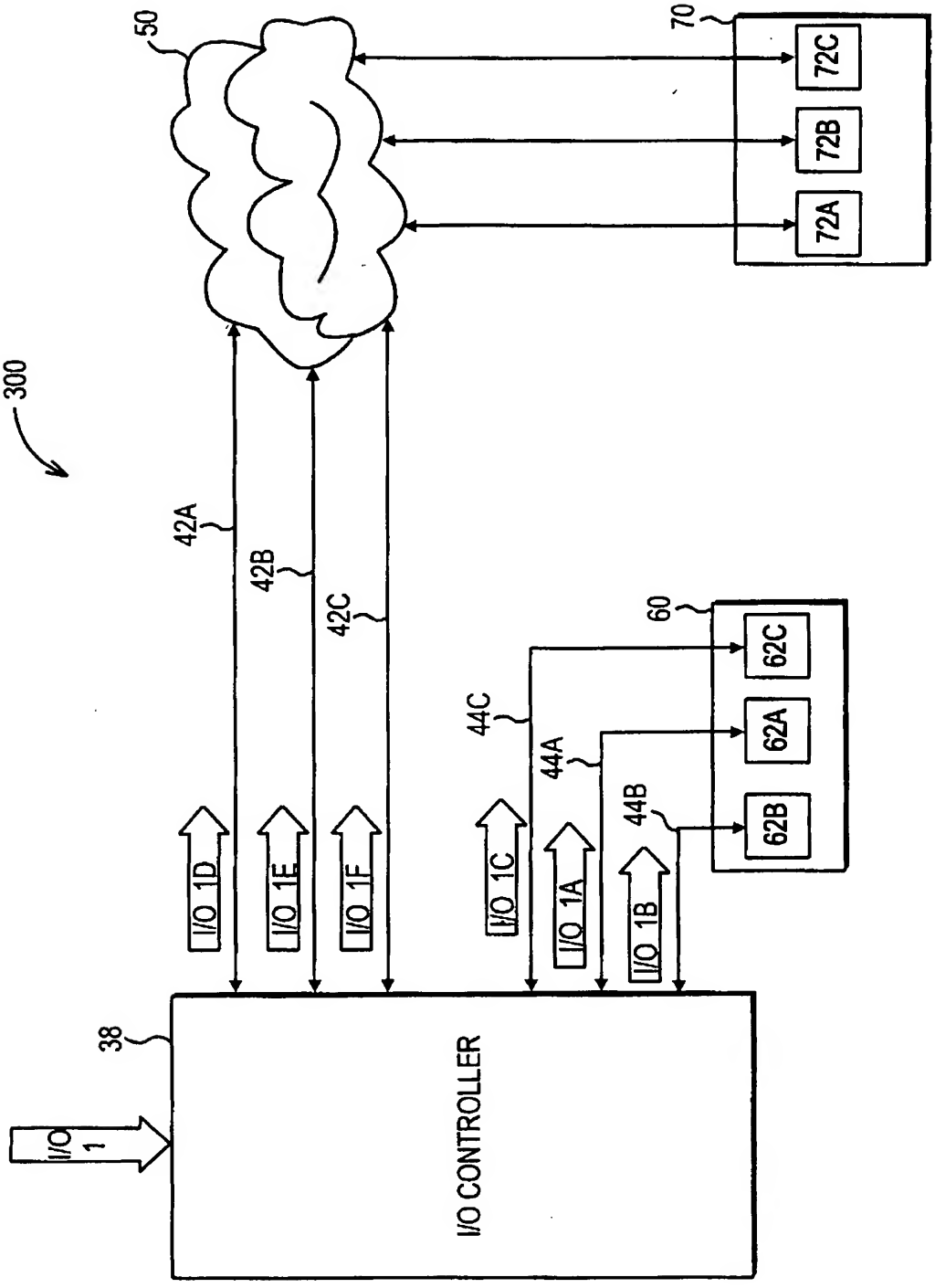

300
50
70
72C
72B
72A
42A
42B
42C
60
62C
62A
62B
44C
44A
44B
I/O 1D
I/O 1E
I/O 1F
I/O 1C
I/O 1A
I/O 1B
38
I/O 1
I/O CONTROLLER

FIG. 4

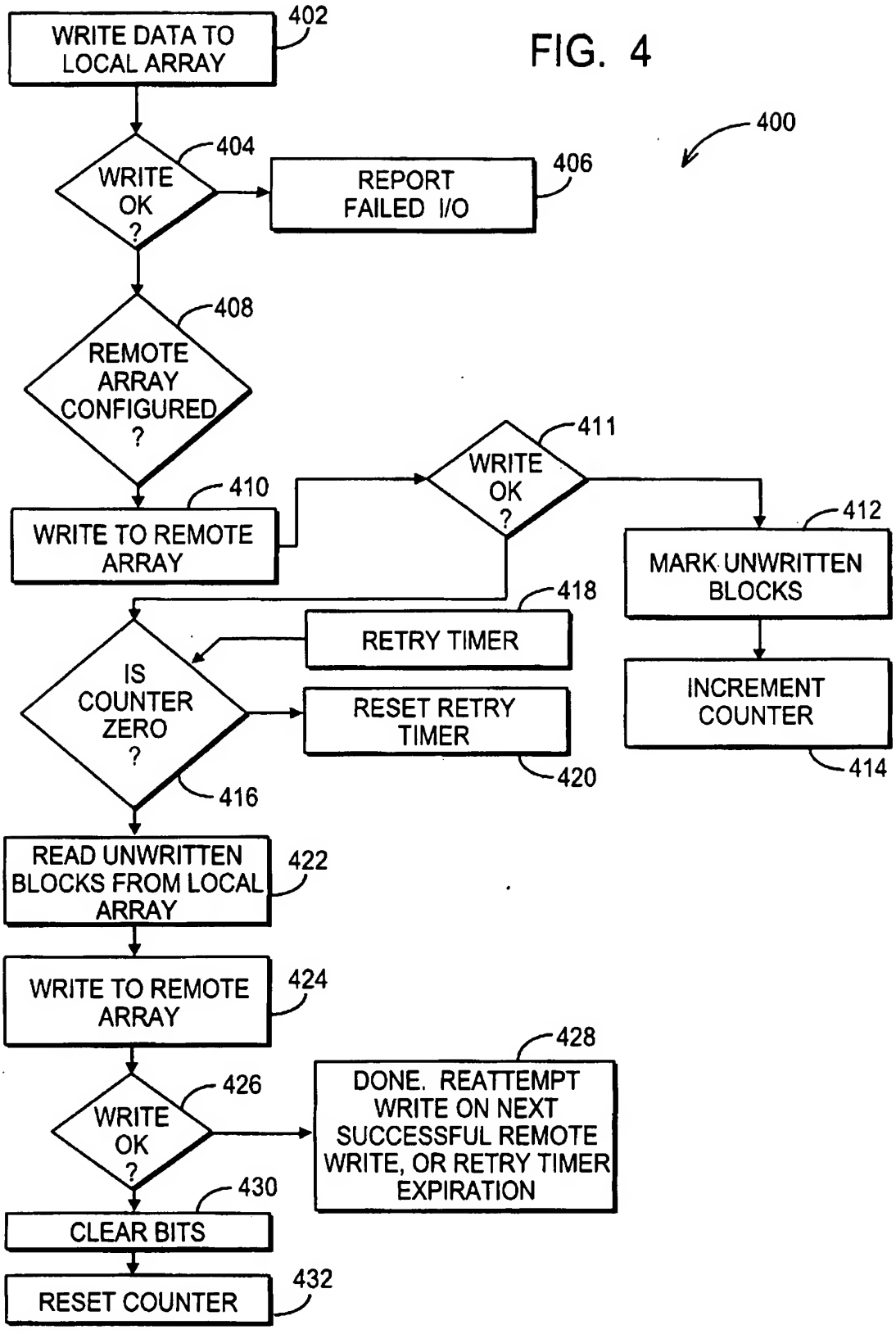
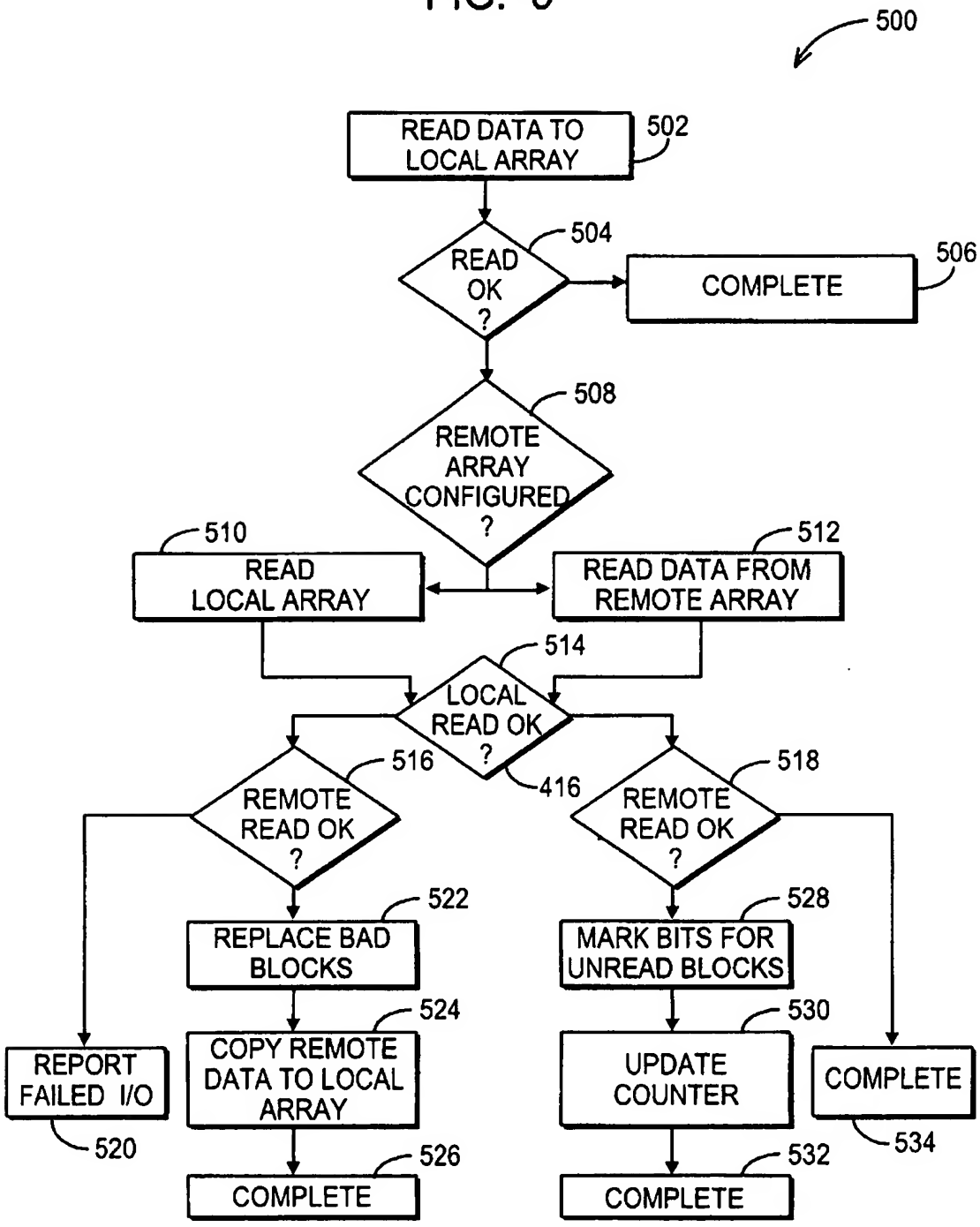

400
WRITE DATA TO LOCAL ARRAY
402
WRITE OK ?
404
REPORT FAILED I/O
406
REMOTE ARRAY CONFIGURED ?
408
WRITE TO REMOTE ARRAY
410
WRITE OK ?
411
MARK UNWRITTEN BLOCKS
412
INCREMENT COUNTER
414
RETRY TIMER
418
IS COUNTER ZERO ?
416
RESET RETRY TIMER
420
READ UNWRITTEN BLOCKS FROM LOCAL ARRAY
422
WRITE TO REMOTE ARRAY
424
WRITE OK ?
426
DONE. REATTEMPT WRITE ON NEXT SUCCESSFUL REMOTE WRITE, OR RETRY TIMER EXPIRATION
428
CLEAR BITS
430
RESET COUNTER
432

FIG. 5


500
READ DATA TO LOCAL ARRAY
502
READ OK ?
504
COMPLETE
506
REMOTE ARRAY CONFIGURED ?
508
READ LOCAL ARRAY
510
READ DATA FROM REMOTE ARRAY
512
LOCAL READ OK ?
514
416
REMOTE READ OK ?
516
REMOTE READ OK ?
518
REPORT FAILED I/O
520
REPLACE BAD BLOCKS
522
COPY REMOTE DATA TO LOCAL ARRAY
524
COMPLETE
526
MARK BITS FOR UNREAD BLOCKS
528
UPDATE COUNTER
530
COMPLETE
532
COMPLETE
534